

Automatic Power Foldback for Audio Applications

ABSTRACT

A power foldback circuit to automatically control the power of an audio amplifier by using the volume inputs to a pre-amp source which drives the audio amplifier. In an embodiment, a Universal Serial Bus (USB) on a personal computer is used to drive the audio speakers. In this circuit an audio digital to analog converter (DAC) with a USB interface receives a digitally encoded audio signal from a personal computer (PC). The USB DAC outputs an analog audio signal to a audio amplifier circuit. A supervisory circuit monitors the power used by the audio amplifier and through a volume control circuit lowers the volume control into the USB DAC to prevent the entire circuit from drawing more than the allowed power supplied by the USB connection to the PC.